## **Carbon Sequestration Incentives Act**

Floor Speech

Mr. President: I rise today to introduce the Domestic Carbon Storage Incentive Act of 2000 – which will provide financial incentives to landowners who increase conservation practices which help pull carbon dioxide out of the atmosphere and store it as carbon in the soil. This bill seeks to encourage the positive contributions to the environment made by the agriculture industry. I am joined in introducing this bill by my friends, Sen. Kerrey of Nebraska and Sen. Murkowski of Alaska.

For some time now, I have been looking for a way to approach environmental issues from an incentive-based, pro-active stance. I believe we are on the verge of seeing agriculture come into a whole new market – an environmental market where producers will benefit rather than be burdened by environmental concerns.

U.S. agriculture has long been appreciated for its ability to feed the world. But as any good farmer knows – in order to grow good crops, you must take care of the land – be a steward of the land. Farmers take this role very seriously, but sometimes markets and economic stress make conservation too difficult to pursue. This bill would help offset some of the cost to expand conservation practices.

It is this eco-agriculture that we should encourage and enhance to deal with environmental concerns rather than resorting to government regulations and mandates to solve our problems. Farmers want to do the right thing – they have more reason than anyone to preserve and protect the land, water and air – but

government and markets do not always make that job easy.

I applaud the work Sen. Roberts has done in this area – his bill to enhance carbon sequestration research has called needed attention to this important area. My bill will focus on providing financial incentives to landowners for carbon conserving practices while tying them to the research process. The two approaches together will help advance this important environmental tool.

Why do this? Carbon dioxide is a greenhouse gas believed to contribute to global warming. While there is debate over the role in which human activity plays in speeding up the warming process, there is broad consensus that there are increased carbon levels in the atmosphere today.

Until now, the only real approach seriously considered to address climate change was an international treaty which calls for emission limits on carbon dioxide – which would mean limiting the amount that comes from your car, your business and your farm. This treaty -- the Kyoto treaty, also favored exempting developing nations from emission limits -- putting the U.S. economy at a distinct disadvantage. Approaching the issue of climate change in this fashion would be very costly and would not respond to the global nature of this problem.

Instead, my approach encourages offseting greenhouse gases through improved land management and conservation. As a result, these practices will also lead to better water quality, less runoff pollution, better wildlife habitat and an additional revenue source for farmers. It is a win-win proposition for agriculture and the environment.

Specifically, my bill will allow landowners to submit plans detailing practices they would be willing to undertake to store additional carbon in the soil. These plans will then compete for entrance into the program – with the best plans achieving funding. Verification of this program would be similar to current conservation programs like EQIP (Environmental Quality Incentives Program) – where farmers need only comply with the practices they set forth in the contract. The program is limited to 5 million acres – and is not a setaside. Rather, this bill encourages conservation practices like no-till, buffer strips and biomass production – to name a few – which are known to enhance soils' ability to store carbon.

Under this program, contracts would be for a minimum of 10 years and USDA would be required – in conjunction with other agencies and land grant universities – to finalize criteria for measuring the carbon-storing ability of various conservation practices. This objective will be greatly aided by the research of organizations like K-State who have significant research already conducted on various carbon-storing practices.

I realize that often well-intentioned government efforts lead to increased mandates and hoops for land owners in order to comply. That is why I have designed this bill to be driven by landowners and completely voluntary.

Agriculture can play a substantial role in protecting the environment. We must reward conservation practices which help clean the air and water – and offset global warming – instead of merely focusing on costly regulations which penalize land owners in the name of the public good.

There are so many benefits which carbon storage will provide.

- The total carbon sequestration and fossil fuel offset potential of U.S. cropland is currently estimated at 154 million metric tons of carbon per year or 133% of the total greenhouse gas emissions by agricultural land and forestry activities. In other words even current agricultural croplands have the ability to store carbon in the soil so imagine how much more this process could be enhanced if a focused effort was made. [USDA]
- Early estimates indicate that the potential for a carbon market for U.S. agriculture could reach \$5 billion per year for the next 30-40 years. Carbon markets are already emerging in the private sector with farmers selling their carbon-storing practices to utilities. [Consortium for Agricultural Soils Mitigation of Greenhouse Gases CASMGS].
- Farmers are already beginning to look toward carbon sequestration practices as a potential new market. Between 1998 and 1999, Iowa farmers grew and harvested 4,000 tons of switchgrass for use by a utility. These farmers not only benefit from the sale of the biomass commodity itself but are able to sell the additional benefit they provided in growing the switchgrass carbon sequestration. This bill will allow all farmers to progress toward verification and potential sale of carbon benefits to third parties.
- The estimated amount of Carbon stored in world soils is more

than twice the Carbon living in vegetation or in the atmosphere. Approximately 50% of the soil organic carbon has been lost from the soil over a period of 50 to 100 years of cultivation. This loss represents the potential for storage of Carbon in the soil. [Kansas State University – Dept. of Agronomy research paper]

- In the tallgrass prairie (located in Kansas), Kansas State University researchers have demonstrated an increase of approximately 2 tons of Carbon per acre through increased conservation practices. This demonstrates the potential of rangeland soils to sequester additional Carbon under proper management. [Kansas State University Dept. of Agronomy research paper]
- There are already a number of **known agricultural practices** which enhance carbon sequestration including:
  - Restoring degraded soils
  - Increasing biomass production
  - The use of no-till farming
  - Converting marginal lands to compatible land use systems
  - Increased production of high carbon-storing crops
  - Increased use of conservation and riparian buffers strips
  - Increased use of winter cover crops and crop rotation.

Obviously, carbon sequestration has a lot to offer as an environmental and agricultural policy. We must provide both more research and outreach to landowners on this win-win possibility. My bill provides a cohesive way of gathering more information diverse soil types the best ways to store carbon in the soil while rewarding farmers for taking this pro-active approach to a growing environmental concern.